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Sequence Listing was accepted.

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Reviewer: Durreshwar Anjum

Timestamp: [year=2010; month=5; day=6; hr=16; min=3; sec=54; ms=159; ]

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Application No: 10578139

Version No: 2.0

Input Set:

Output Set:

Started: 2010-04-30 17:29:08.471

Finished: 2010-04-30 17:29:11.488

Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 17 ms

Total Warnings: 92

Total Errors: 0

No. of SeqIDs Defined: 92

Actual SeqID Count: 92

Error code	Error Description
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W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
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W 213	Artificial or Unknown found in <213> in SEQ ID (7)
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W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)

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Error code

Error Description

This error has occurred more than 20 times, will not be displayed

# SEQUENCE LISTING

<110> MIYAGAWA , Shuji  
MATSUNAMI , Katsuyoshi

<120> HLA-E CHIMERIC MOLECULE

<130> 2520-0132PUS1

<140> 10578139

<141> 2010-04-30

<160> 92

<170> PatentIn version 3.4

<210> 1

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
SP of HLA-E

<400> 1

Met Val Asp Gly Thr Leu Leu Leu Leu Leu Ser Glu Ala Leu Ala Leu  
1 5 10 15

Thr Gln Thr Trp Ala  
20

<210> 2

<211> 90

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
al domain of HLA-E

<400> 2

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly  
1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln  
20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg  
35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr  
50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr  
65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala  
85 90

<210> 3

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain of HLA-E

<400> 3

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp  
1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp  
20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr  
35 40 45

Ala Ala Gln Ile Ser Glu Gln Lys Ser Asn Asp Ala Ser Glu Ala Glu  
50 55 60

His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys  
65 70 75 80

Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu  
85 90

<210> 4

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain of HLA-E

<400> 4

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu  
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr  
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu  
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp  
85 90

<210> 5

<211> 63

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain of HLA-E

<400> 5

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly  
1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val  
20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys  
35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu  
50 55 60

<210> 6

<211> 63

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
SP of HLA-E

<400> 6

atggtagatg gaaccctcct ttactctc tcggaggccc tggcccttac ccagacctgg 60

gcg 63

<210> 7

<211> 270

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a1 domain of HLA-E

<400> 7

ggctcccact ccttgaagta ttccacact tccgtgtccc ggcccggccg cggggagccc 60

cgcttcact ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120

gcgagtcgga ggatggtgcc gcgggcccgc tggatggagc aggaggggtc agagtattgg 180

gaccgggaga caccgagcgc caggacacc gcacagattt tccgagtga tctgcggacg 240

ctgcgcggct actacaatca gagcgaggcc 270

<210> 8

<211> 276

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain of HLA-E

<400> 8

gggtctcaca cctgcagtg gatgcatggc tgcgagctgg ggcccgcag gcgcttcctc 60

cgcggttatg aacagttcgc ctacgacggc aaggattatc tcacctgaa tgaggacctg 120

cgctcctgga ccgcggtgga caggcggct cagatctccg agcaaaagtc aaatgatgcc 180

tctgaggcgg agcaccagag agcctacctg gaagacacat gcgtggagtg gctccacaaa 240

tacctggaga aggggaagga gacgctgctt cacctg 276

<210> 9

<211> 276

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain of HLA-E

<400> 9

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gagcccccaa agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg      60
tgctggggccc tgggcttcta ccctgcggag atcacactga cctggcagca ggatggggag      120
ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttccag      180
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag      240
catgagggggc tacccgagcc cgtcaccctg agatgg                                276
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<210> 10

<211> 192

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain of HLA-E

<400> 10

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aagccggctt cccagcccac catcccatc gtgggcatca ttgctggcct ggttctcctt      60
ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt      120
ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgcccaggg gtctgagtct      180
cacagcttgt aa                                                            192
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<210> 11

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
SP of HLA-G1

<400> 11

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Met Val Val Met Ala Pro Arg Thr Leu Phe Leu Leu Leu Ser Gly Ala
1           5           10           15
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Leu Thr Leu Thr Glu Thr Trp Ala
20
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<210> 12



<211> 90  
 <212> PRT  
 <213> Artificial Sequence  
 <220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a1 domain of HLA-G1

<400> 12

Gly Ser His Ser Met Arg Tyr Phe Ser Ala Ala Val Ser Arg Pro Gly  
 1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ala Met Gly Tyr Val Asp Asp Thr Gln  
 20 25 30

Phe Val Arg Phe Asp Ser Asp Ser Ala Cys Pro Arg Met Glu Pro Arg  
 35 40 45

Ala Pro Trp Val Glu Gln Glu Gly Pro Glu Tyr Trp Glu Glu Glu Thr  
 50 55 60

Arg Asn Thr Lys Ala His Ala Gln Thr Asp Arg Met Asn Leu Gln Thr  
 65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala  
 85 90

<210> 13  
 <211> 92  
 <212> PRT  
 <213> Artificial Sequence  
 <220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a2 domain of HLA-G1

<400> 13

Ser Ser His Thr Leu Gln Trp Met Ile Gly Cys Asp Leu Gly Ser Asp  
 1 5 10 15

Gly Arg Leu Leu Arg Gly Tyr Glu Gln Tyr Ala Tyr Asp Gly Lys Asp  
 20 25 30

Tyr Leu Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Thr  
 35 40 45

Ala Ala Gln Ile Ser Lys Arg Lys Cys Glu Ala Ala Asn Val Ala Glu  
50 55 60

Gln Arg Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu His Arg  
65 70 75 80

Tyr Leu Glu Asn Gly Lys Glu Met Leu Gln Arg Ala  
85 90

<210> 14

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain of HLA-G1

<400> 14

Asp Pro Pro Lys Thr His Val Thr His His Pro Val Phe Asp Tyr Glu  
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Ile  
20 25 30

Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Val Glu Leu  
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
65 70 75 80

His Glu Gly Leu Pro Glu Pro Leu Met Leu Arg Trp  
85 90

<210> 15

<211> 40

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain of HLA-G1

<400> 15

Lys Gln Ser Ser Leu Pro Thr Ile Pro Ile Met Gly Ile Val Ala Gly  
 1 5 10 15

Leu Val Val Leu Ala Ala Val Val Thr Gly Ala Ala Val Ala Ala Val  
 20 25 30

Leu Trp Arg Lys Lys Ser Ser Asp  
 35 40

<210> 16

<211> 72

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
 SP of HLA-G1

<400> 16

atggtggtca tggcgccccg aaccctcttc ctgctgtctc cgggggccct gaccctgacc 60

gagacctggg cg 72

<210> 17

<211> 270

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a1 domain of HLA-G1

<400> 17

ggctcccact ccatgaggta tttcagcgcc gccgtgtccc ggcccggccg cggggagccc 60

cgcttcatcg ccatgggcta cgtggacgac acgcagttcg tgcggttcga cagcgactcg 120

gcgtgtccga ggatggagcc gcggggcgccg tgggtggagc aggaggggcc agagtattgg 180

gaagaggaga cacggaacac caaggccac gcacagactg acagaatgaa cctgcagacc 240

ctgcgcggct actacaacca gagcgaggcc 270

<210> 18

<211> 276

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a2 domain of HLA-G1

<400> 18  
 agttctcaca cctccagtg gatgattggc tgcgacctgg ggtccgacgg tcgcctcctc 60  
 cgcggttatg aacagtatgc ctacgatggc aaggattacc tcgccctgaa cgaggacctg 120  
 cgctcctgga ccgcagcggg cactgcggtc cagatctcca agcgcaagtg tgaggcggcc 180  
 aatgtggctg aacaaaggag agcctacctg gagggcacgt gcgtggagtg gctccacaga 240  
 tacctggaga acgggaagga gatgctgcag cgcgcg 276

<210> 19  
 <211> 276  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 a3 domain of HLA-G1

<400> 19  
 gacccccca agacacacgt gacccaccac cctgtctttg actatgaggc caccctgagg 60  
 tgctggggcc tgggcttcta ccctgcgagg atcatactga cctggcagcg ggatggggag 120  
 gaccagacc aggacgtgga gctcgtggag accaggcctg caggggatgg aaccttcag 180  
 aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240  
 catgaggggc tgccggagcc cctcatgctg agatgg 276

<210> 20  
 <211> 123  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic chimeric sequence  
 Transmembrane domain of HLA-G1

<400> 20  
 aagcagtctt ccctgcccac catcccatc atgggtatcg ttgctggcct ggttgtcctt 60  
 gcagctgtag tcaactggagc tgcggtcgct gctgtgctgt ggagaaagaa gagctcagat 120  
 tga 123

<210> 21  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Reformed SP

<400> 21

Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala  
1 5 10 15

Leu Thr Leu Thr Glu Thr Trp Ala  
20

<210> 22

<211> 90

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
al domain

<400> 22

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly  
1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln  
20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg  
35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr  
50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr  
65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala  
85 90

<210> 23

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a2 domain

<400> 23

Ser Ser His Thr Leu Gln Trp Met Ile Gly Cys Asp Leu Gly Ser Asp  
1 5 10 15

Gly Arg Leu Leu Arg Gly Tyr Glu Gln Tyr Ala Tyr Asp Gly Lys Asp  
20 25 30

Tyr Leu Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Thr  
35 40 45

Ala Ala Gln Ile Ser Lys Arg Lys Cys Glu Ala Ala Asn Val Ala Glu  
50 55 60

Gln Arg Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu His Arg  
65 70 75 80

Tyr Leu Glu Asn Gly Lys Glu Met Leu Gln Arg Ala  
85 90

<210> 24

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
a3 domain

<400> 24

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu  
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr  
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu  
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala  
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln  
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp  
85 90

<210> 25

<211> 63

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Transmembrane domain

<400> 25

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly  
1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val  
20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys  
35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu  
50 55 60

<210> 26

<211> 72

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
Reformed SP

<400> 26

atggcggtca tggcgccccg aaccctcgtc ctgtactct cgggggccct gaccctgacc 60

gagacctggg cg 72

<210> 27

<211> 270

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence  
al domain

<400> 27

ggctcccact cct